What is claimed is:

1 Claim 1. In a software driven emulator comprised of a 2(plurality of modules on printed circuit boards, each of said modules including a processor chip and at least one SDRAM 3 coupled to the processor chip, a maintenance bus coupled to 4 5 and a memory controller coupled to said SDRAM, 6 maintenance bus, a method executing bulk data transfers to 7 said SDRAM via said maintenance bus, including the steps of:

transferring data to said SDRAM via said
maintenance bus on each clock cycle for a predetermined
number of clock cycles in succession;

halting the transfer of data after said predetermined number of data transfers;

initiating a SDRAM refresh cycle after said halting step;

resuming said transferring step upon receipt of a done signal after said refresh cycle.

Claim 2. In a software driven emulator comprised of a plurality of modules on printed circuit boards, each of said modules including a processor chip and at least one SDRAM coupled to the processor chip, a maintenance bus coupled to said SDRAM, and a memory controller coupled to said maintenance bus, a method executing bulk data transfers to said SDRAM via said maintenance bus, including the steps of:

8 transferring data from said SDRAM via said 9 maintenance bus on each clock cycle for a predetermined 10 number of clock cycles in succession;

halting the transfer of data after said
predetermined number of data transfers;

initiating a SDRAM refresh cycle after said

14 halting step;

POU9-2000-0047-US1

15

16

3

5

6

7

- resuming said transferring step upon receipt of a done signal after said refresh cycle.
- 1 Claim 3. A method of executing bulk transfers as in claim 1
- 2 including establishing a starting address for said bulk
- 3 transfer in said memory controller and incrementing said
- 4 starting address by one on each clock cycle.
- 1 Claim 4. A method of executing bulk transfers as in claim 2
- 2 including establishing a starting address for said bulk
- 3 transfer in said memory controller and incrementing said
- 4 starting address by one on each clock cycle.
- 1 Claim 5. A method of executing bulk transfers as in claim 1
 - wherein a data word is transferred on each clock cycle.
- 1 Claim 6. A method of executing bulk transfers as in claim 2
- 2 wherein a data word is transferred on each clock cycle